1.0 EXECUTIVE SUMMARY

1.1 General Information

Project Information:

Louisville Urban Government Center

Consultant Information:

ATC Group Services LLC 11001 Bluegrass Parkway Louisville, Kentucky 40299 **Telephone:** 502.722.1401 **Fax:** 502.267.4072

Reconnaissance Dates: November 22, 2016

November 30, 2016

Site Assessors: Curt Jones and Nejma Piagentini

Senior Reviewer: Curt Jones

Environmental Professional: Nejma Piagentini

Site Information:

11.5 Acres

768 - 850 Barret Avenue Louisville, KY 40204 Jefferson County

Site Access Contact:

Tim Robinson, Facility/Maintenance Supervisor

Louisville Urban Government Center

Client Information:

Dr. Allison Smith Brownfields Program Manager Louisville Forward/ Develop Louisville

444 S. Fifth Street Louisville, KY 40202 502.574.4140

Nejma Piagentini Environmental Scientist

Environmental Professional Statement:

I declare that, to the best of our professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in § 312.10 part of 40 CFR 312. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Curtis L. Jones, CHMM

Environmental Department Manager, Principal Scientist Site Assessor/Environmental Professional/Senior Reviewer

PHASE I ENVIRONMENTAL SITE ASSESSMENT Louisville Urban Government Center 768 – 850 Barret Avenue Louisville, KY 40204

1.2 Findings and Conclusions Summary

ATC has performed this Phase I Environmental Site Assessment (ESA) of the property in conformance with the scope and limitations of ASTM Standard Practice E1527-13. Exceptions to, or deletions from, this practice are described in Section 2.0 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property with the exception of the following summarized in the table below.

FINDINGS AND CONCLUSIONS SUMMARY							
Report Section		Further Action?	De minimis Condition	REC and/or CREC	Historical REC	ASTM Non- Scope Condition	Description
4.0	User Provided Information	No	No	No	No	No	User indicated that mold remediation had occurred historically in structures at 768 & 810 Barret Avenue. See Sect. 9.5.
5.1.1	Federal Database Findings	No	No	No	No	No	
5.1.2	State and Tribal Database Findings	No	No	Yes	Yes	No	Five USTs were registered to Medical Examiners Office. Three are exempt USTs. See Notes 1 & 2.
5.1.3	Local Environmental Record Sources	No	No	No	Yes	No	UST Closure Assessment Report indicates remedial action associated with two former USTs. See Note 1.
5.3	Historical Records Sources	Yes	No	Yes	No	No	A historical gas station was identified at 1235 E. Breckinridge Street at the southeast corner of the subject property. See Note 3.
6.2	Hazardous Substance Use,	No	No	No	No	No	
6.3	Storage and Disposal Underground Storage Tanks	Yes	No	Yes	Yes	No	See Notes 1, 2 & 3.
6.4	Aboveground Storage Tanks	No	No	No	No	No	Two, nominal 500-gallon fuel oil ASTs within secondary containment exist on the property for backup electric power generation.
6.5	Other Petroleum Products	No	Yes	No	No	No	Numerous containers of gasoline and other petroleum products are located in Lawn Maintenance Room east of the Boiler House. See Note 4a. One hydraulic reservoir leaked near the inoperable elevator on the south end of the pedestrian tunnel. See Note 4b.
6.6	Polychlorinated Biphenyls (PCBs)	No	No	No	No	No	LG&E reports that the pad-mounted transformers on the property are Non-PCB (<50 ppm).
6.7	Unidentified Substance Containers	No	No	No	No	No	, , ,
6.8	Nonhazardous Solid Waste	No	No	No	No	No	
6.9	Wastewater	No	No	No	No	No	
6.10	Waste Pits, Ponds and Lagoons	No	No	No	No	No	
6.12	Sumps Septic Systems	No No	No No	No No	No No	No No	Cannot be ruled out due to history of property use for residential and commercial purposes.

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	FINDINGS AND CONCLUSIONS SUMMARY						
Report Section		Further Action?	De minimis Condition	REC and/or CREC	Historical REC	ASTM Non- Scope Condition	Description
6.13	Stormwater Management System	No	No	No	No	No	
6.14	Wells	No	No	No	No	No	
7.0	Subsurface Vapor Migration	No	No	No	No	No	Cannot be ruled out due to presence of historical gas station on the southeast corner of property. See Section 7.0 and Note 3.
8.0	Interviews	No	No	No	No	No	
9.1	Asbestos-Containing Material (ACM)	Yes	No	No	No	No	Suspected ACM was observed in all structures. Refer to ACM investigation reports provided under separate cover. See Note 5.
9.2	Radon	No	No	No	No	No	
9.3	Lead in Drinking Water	No	No	No	No	No	
9.4	Lead-Based Paint (LBP)	No	No	No	No	No	
9.5	Mold Screening	No	No	No	No	No	
9.6	Additional User Requested Services	No	No	No	No	No	

Note 1: Two former diesel fuel USTs, one 5,000-gallon and one 1,000-gallon capacity, were removed from separate areas on the south side of the former hospital building in August 1994. A soil remedial action was performed by the closure contractor at the time of UST closure whereby fifteen truckloads of contaminated soils were transported off-site for disposal. See Section 5.3.9 for a complete description of the two former USTs. Due to apparent petroleum releases that affected area soils associated with the two USTs closed in 1994, as evidenced by remedial action undertaken at the time of UST closure, and the determination of the KDEP that applicable regulatory requirements have been satisfactorily met without subjecting the property to required institution or engineering controls, the former USTs closed in 1994 represent an *historical recognized environmental condition* associated with the property.

Note 2: Two 20,000-gallon fuel oil tanks located on the north side of the Boiler House are classified as exempt USTs. A letter from Jefferson County to the Kentucky UST Branch dated June 5, 1995 stated that the two 20,000-gallon fuel oil tanks on the property were "scheduled for closure in 1995." A May 2, 1995 letter from the Jefferson County Fiscal Court to KDEP states that these tanks "remain in the ground and are budgeted to be closed in-place during 1995." No information related to the closure of these exempt oil USTs and their location was provided or could be obtained by ATC during the course of this assessment. Based on the absence of documentation related to operation, assessment and/or closure of the exempt USTs (one 5,000-gallon fuel oil reportedly removed in 1992, and the two 20,000-gallon fuel oil tank reportedly closed in-placed on the property), these historical exempt USTs represent a represent recognized environmental condition associated the property.

Note 3: Historical city directories and fire insurance maps indicate that a parcel at the southeast corner of the property, previously addressed at 1235 E. Breckinridge Street, is the location of an historical gas station. This street address was formerly at the northwest corner of the intersection of Barret Avenue and E. Breckinridge Street. Historical records indicate that this former gas station may have operated with five USTs under various names including Orma Sparks Gas Station, Groms Texaco Service, and Geo Wittenaur Service Station from 1928 or soon before, through 1963 or shortly thereafter. Subsequent review of historical records indicates that this facility was closed in the early 1970's or mid-to-late 1960's. ATC requested KDEP records for this address; however, the state agency indicated that no records are available. Although the property has been redeveloped, the possibility that the USTs related to this facility exist on the property cannot be rule out. The presence of a historical gas station at the southeast corner of the Property represents a *recognized environmental condition* associated with the property.

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Note 4a: Petroleum products, including oil, gasoline and used oil, were observed within the Lawn Maintenance Room building east of the Boiler House. Numerous containers of gasoline of less than 5-gallons capacity and gasoline-containing equipment were observed in this room. This enclosure possesses a concrete floor with concrete foundation, but does not appear to have other secondary containment features. Further, no spill kits and/or response equipment were observed within the room. Consequently, the accumulation and storage of oil-filled equipment in the Lawn Maintenance Room represents a de *minimis condition* associated with the property.

Note 4b: A hydraulic elevator, in nonfunctioning condition, was observed on the south end of the pedestrian tunnel near the UCGC building at 810 Barret Avenue. The hydraulic elevator possesses an associated reservoir of hydraulic fluid which appeared to be leaking. ATC observed accumulated hydraulic fluid in an apparent drip pan at the base of the mechanical room for the hydraulic elevator in the pedestrian tunnel. The elevator is no longer in use and the leaking fluid appeared to be essentially contained. The dripping hydraulic fluid associated with non-functional elevator in the pedestrian tunnel area represents a *de minimis condition* associated with the property.

Note 5: ATC performed an investigation for the presence of ACM in all structures as a separate service concurrently with the Phase I ESA. The ACM investigation reports for each structure were prepared under separate cover. All suspect ACM should be properly assessed and/or abated in accordance with applicable Louisville Metro APCD and federal regulations prior to disturbance by demolition or renovation activities. Observed building materials and finishes were noted to range from good to poor condition in various areas of the property structures at the time of the site reconnaissance.

1.3 Significant Data Gap Summary

Data gaps may have been encountered during the performance of this Phase I ESA and are discussed within the section of the report where they were encountered. However, according to ASTM Standard Practice E1527-13, data gaps are only significant if "other information and/or professional experience raise reasonable concerns involving the data gap." The following is a summary of *significant data gaps* identified in this report.

	SIGNIFICANT DATA GAP SUMMARY				
	Report Section	Description			
3.5	Current Uses of Adjoining Properties	No significant data gap identified.			
4.2	Environmental Liens or Activity and	An Environmental Lien Search was performed for the UCGC			
	Use Limitations (AULs)	property at 810 Barret Avenue, Parcel No. 021J01300000.			
		Additional lien searches for other parcels were not performed,			
		but can be obtained at a later date if necessary.			
5.1	Standard Environmental Records	No significant data gap identified.			
5.2	Physical Setting Sources	No significant data gap identified.			
5.3	Historical Records Sources	No significant data gap identified.			
6.1	Methodology and Limiting Conditions	No significant data gap identified.			
8.0	Interviews	No significant data gap identified.			

1.4 Recommendations

Based on information collected from the Phase I ESA, ATC offers the following recommendations for further action:

- Additional subsurface assessment for possible soil and groundwater contamination is recommended in the following locations:
 - 1. Area of former USTs associated with soil remediation during closure activities in 1994.

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- 2. Area of existing 20,000-gallon capacity exempt fuel oil tanks north of the Boiler House.
- 3. Vicinity of former Nurse's Home near southeast corner of the building at 810 Barret Avenue to assess for possible releases from a former fuel oil tank reported to have been removed in 1992.
- 4. Area former occupied by the historical gasoline station reported to have had up to five USTs at the southeast corner of the property from the mid- to late-1920's through the late-1960's. Possible geophysical assessment (ground-penetrating radar) may also be considered to determine if any evidence exist to indicate that the former USTs exist on the property.
- 5. Southwest corner of site in the vicinity of the former address of a possible historical automotive repair shop, *The Hydraulics Mart* at 1201 E. Breckinridge Street.
- 6. Southwest and southeast corners of property where historical city directories indicate possible dry cleaning operations on adjacent tracts.
- 7. Southern border of site along E. Breckinridge Street and Vine Street west parking lot area where historical residential structures existed for the presence of possible heavy metals and fuel oil and other possible historical anthropogenic sources (e.g., coal storage/burning, auto maintenance).
- 8. Locations at the site near sewer manholes or other locations to determine if possible contaminants originating from historical hospital operations may be present in subsurface soil and/or groundwater as a result of compromised condition of the combined sewers on the property.
- Further assessment for ACM will be necessary to quantify any ACM requiring abatement prior to any planned demolition or renovation activities. Appropriate maintenance of any remaining ACM on the property must be taken into account to prevent releases to the environment or possible worker exposure.
- Further assessment for LBP may be necessary prior to planned renovation activities to prevent possible worker exposure or releases of lead to the environment.
- If the property structures are vacated, all petroleum and hazardous substances containers, bulk storage tanks (i.e., aboveground storage tanks) and equipment should be removed and properly reused or disposed in accordance with applicable regulations.